

WHAT IS CLAIMED IS:

1. A method for allocating bandwidth in a wireless Local Area Network having an Access Point and at least one wireless communication terminal, comprising the steps of:

5 (a) the Access Point allocating a fixed bandwidth to said at least one wireless communication terminal;

(b) receiving a transmission rate corresponding to a desired Contention Free Period of data to be transceived from said at least one wireless communication terminal; and

10 (c) adjusting a rate of Contention Free Period occupancy of said at least one wireless communication terminal in the fixed bandwidth, based on the received transmission rate.

2. The method of claim 1, wherein the data is real time data.

3. The method of claim 1, wherein in the step (a), the fixed bandwidth is a sum of the Contention Free Period for real time data transmitting/receiving, and a Contention Period for non-real time data transmitting/receiving.

4. The method of claim 1, wherein in the step (b), the transmission rate received from said at least one wireless communication terminal is a data packet length and a data transmission speed.

5. The method of claim 1, wherein the step (c) comprises the steps of:

calculating a Contention Free Period occupancy requested by said at least one wireless communication terminal;

5 accepting the Contention Free Period occupancy as a current Contention Free Period occupancy, if the Contention Free Period occupancy requested by said at least one wireless communication terminal does not exceed a Contention Free Period occupancy limit; and

10 associating said at least one wireless communication terminal to the Access Point after adjusting a ratio of the Contention Free Period to Contention Period, if a sum of the current Contention Free Period occupancy is less than a maximum Contention Free Period.

6. An apparatus for allocating bandwidth in a wireless Local Area Network, including at least one wireless communication terminal, comprising:

bandwidth fixing means for fixing bandwidth to be allocated to said at least one wireless communication terminal;

5 transmission rate receiving means for receiving a transmission rate of said at least one wireless communication terminal from said at least one wireless communication terminal, if said at least one wireless communication terminal is intended for a data transmission through a Contention Free Period; and

10 period adjusting means for adjusting a rate of a Contention Free Period occupancy of said at least one wireless communication terminal in the bandwidth, based on the received transmission rate.

7. The apparatus of claim 6, wherein the data is real time data.

8. The apparatus of claim 6, wherein the bandwidth is a sum of the Contention Free Period for real time data transmitting/receiving, and a Contention Period for non-real time data transmitting/receiving.

9. The apparatus of claim 6, wherein the transmission rate received from said at least one wireless communication terminal is a data packet length and a data transmission speed.

10. The apparatus of claim 6, wherein the period adjusting means comprises:

calculating means for calculating the Contention Free Period occupancy requested by said at least one wireless communication terminal,
5 based on the received transmission rate;

accepting means for accepting the requested Contention Free Period occupancy as a current Contention Free Period occupancy, if the Contention Free Period occupancy requested by said at least one wireless communication terminal does not exceed a Contention Free Period occupancy limit; and

10 association means for associating the terminal to an Access Point after adjusting a ratio of the Contention Free Period to Contention Period, if a sum

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of the current Contention Free Period occupancy is less than a maximum
Contention Free Period.

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